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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/819,118	03/27/2001	Shlomo Ovadia	42390P10197	4322

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EXAMINER

BUI, KIEU OANH T

ART UNIT PAPER NUMBER

2611

DATE MAILED: 06/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/819,118

**Applicant(s)**

OVADIA, SHLOMO

**Examiner**

KIEU-OANH T. BUI

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,14-16,20-23,27 and 28 is/are rejected.
- 7) ☒ Claim(s) 3-13,17-19,24-26 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

*(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.*

2. Claims 1-2, 14-16, 20-23, and 27-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Rakib et al. (U.S. Patent No. 6,857,132 B1).

Regarding claim 1, Rakib discloses "a method comprising: receiving a broadband signal at a receiver in accordance with a first modulation technique; tuning the receiver to a channel within the broadband signal; modifying one or more operational parameters of the receiver to demodulate the channel in accordance with a second modulation technique to determine whether the channel is a data channel", i.e., a receiver 308 (Fig. 3) receives broadband signals from a central office via a DSL modem or from CATV headend 314 via a cable modem 318 or from a satellite disk 340 via a dish receiver 342, a tuner/demodulator/decode/demux block 320 at the receiver handles broadband signals to a channel at a first modulation technique, i.e., a QAM, and the receiver can determine whether the channel is a data channel and using a second modulation technique to demodulate the channel (refer to col. 11/lines 44-61 for downstream channels can be any form of multiplexing; col. 14/lines 9-31 for QAM is used on downstream channels; col.

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20/lines 10-28 for the receiver handles programs and services using any available encoding methods; col. 21/lines 4-43 for a closer view of wideband/broadband services using different logical channels for downstream channels; and col. 24/lines 24-42 for block 320 can use any demodulator for demodulating any encoding signals).

As for claim 2, Rakib discloses “wherein the broadband signal is a quadrature amplitude modulated (QAM) cable television signal” (Fig. 3 and col. 12/lines 32-49).

As for claim 14, Rakib discloses “a machine accessible storage medium comprising a plurality of executable instructions which, when executed by an accessing machine, implement a method according to claim 1” (refer to claim 1 above and Fig. 3 for a central office with a Pull Mux control microprocessor 240 for providing program/service data stream to customer on 3, and in Fig. 4 for a program memory 23 in storing instructions within a typical headend multiplexer unit).

As for claims 15-16 and 22-23, Rakib discloses “a machine accessible storage medium comprising a plurality of executable instructions which, when executed by an accessing machine, cause the machine to implement a channel detection agent to modify at least the demodulation technique of a broadband receiver to identify digital channels in a broadband signal, and to analyze at least a subset of header information of identified digital channels to distinguish digital data channels from digital media channels” and a computing device comprising a storage medium and a control unit (refer to claims 1-2 above, Fig. 3 for a central office with a Pull Mux control microprocessor 240 for providing program/service data stream to customer on 3, and in Fig. 4 for a program memory 23 in storing instructions within a typical headend multiplexer unit).

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As for claims 20-21 and 27, Rakib discloses the first modulation technique is QAM and the second modulation technique is QPSK (col. 24/lines 24-42 and col. 25/lines 59-65).

As for claim 28, Rakib discloses “wherein the computing device is a cable modem” (Fig. 3, item 318 for a cable modem).

***Allowable Subject Matter***

3. Claims 3-13, 17-19, and 24-26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 3-9, Rakib and other prior arts do not either alone or combine to further disclose the step of “wherein modifying one or more operational parameters in the receiver comprises: adjusting a demodulator associated with the first modulation technique to demodulate the received channel in accordance with a second modulation technique; sweeping a carrier frequency through a loop bandwidth of the channel to until carrier frequency lock is achieved; and determining that the channel is an active data channel if carrier frequency lock is achieved” as cited in claim 3. Dependent claims 4-9 are allowable based at least on this feature of claim 3.

Regarding claims 10-13, 17-19, and 24-26, Rakib and other prior arts do not further disclose the step of “sweeping a carrier frequency through a loop bandwidth of the channel to until carrier frequency lock is achieved; and determining that the channel is an active data channel if carrier frequency lock is achieved” as cited in claim 10 and similarly in claims 17 and 24. Dependent claims 11-13, 18-19 and 25-26 are allowable based at least on these features of claims 10, 17, and 24.

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***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Rakib et al (US Patent 6,889,385 B1), Leatherbury et al (US Patent 6,763,025 B2), and Burns et al. (US Patent 6,662,135 B1) disclose systems related to cable modem and QAM/QPSK techniques.

6. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

(703) 872-9306, (for Technology Center 2600 only)

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kieu-Oanh Bui whose telephone number is (571) 272-7291. The examiner can normally be reached on Monday-Friday from 9:00 AM to 6:30 PM, with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Grant, can be reached on (571) 272-7294.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'K. Bui', with a long horizontal flourish extending to the right.

Kieu-Oanh Bui  
Primary Examiner  
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KB

June 15, 2005